

# Laboratory Tests of Bitumen Samples Elasticity

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## Abstract

© 2018 Institute of Physics Publishing. All rights reserved. This paper is devoted to the study of the elastic and acoustic properties of bitumen core samples. The travel velocities of the ultrasonic P- and S-waves were determined under in-situ simulation conditions. The resulting data were then used to calculate dynamic Young's modulus and Poisson's ratio. The authors studied the correlation between the elasticity and the permeability and porosity. In addition, the tests looked into how the acoustic properties had changed with temperature rise.

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